

## **Bullying and psychological distress in a vulnerable group: youths in residential childcare.**

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## Abstract

**Objectives:** Previous research has shown that children and youths in residential childcare are exposed to different aggressive behaviors, including peer violence. However, research that has analyzed prevalence of bullying and its relation with psychological distress in this vulnerable group is scarce. Our study was designed to extend previous research, help explain the role of the residential childcare context in bullying behaviors, and explore the relation of bullying with psychological distress among youths in residential childcare in Spain.

**Method:** Fifty-six youths living in residential childcare facilities and 1481 living consistently with at least one biological parent participated. Their age range was 10-15 years. The Bullyharm scale was used to measure bullying. Psychological distress was measured by the Kessler Scale (K10).

**Results:** Youths living in residential childcare reported higher levels of victimization and perpetration than their peers living with their biological parents. The regressions analyses revealed that living in residential childcare facilities positively correlated with psychological distress and perpetration.

**Conclusions:** The residential childcare context is important for understanding individual differences in bullying participation and psychological distress. Future research should continue examining the factors related to bullying in this vulnerable group.

Studying bullying is a priority issue in the scientific community (Sekol & Farrington, 2016). Bullying has been defined as an “unwanted aggressive behavior that inflicts harm or distress, and is repeated multiple times and is also highly likely to be repeated in the context of an observed or perceived power differential” (Patchin & Hinduja, 2015). In the last decade, gradually more attention has been paid to a new evolved manifestation of bullying: cyberbullying. This relatively new form of bullying is defined as a behavior displayed through digital media such as “email, mobile phone calls, text messages, instant messenger, photos and social networking sites, with the intention of causing harm to another person through repeated hostile conduct” (Ortega et al., 2012, p.342). Most researchers agree that both phenomena overlap. For example, longitudinal studies have found bidirectional relations between traditional bullying and cyberbullying over time; i.e. being involved in one bullying type puts students at risk of becoming involved in the other bullying type (Kowalski, Giumetti, Schroeder & Lattanner, 2014; Tarabulus, Heiman & Olenik-Shemesh, 2015). These findings support the idea that cyber- and traditional bullying may reflect different methods of enacting similar behavior (cause harm to others) and form (offline vs. online) of bullying that may be less important than behavior itself (Modecki, Minchin, Harbaugh, Guerra & Runions, 2014; Waasdorp & Bradshaw, 2015).

Past research has revealed that youths’ participation in bullying differ across the bully-victim range (Holt & Espelage, 2007). That is, youth are not simply either a bully or victim because previous studies have demonstrated that there is a reciprocal relationship between perpetration and victimization (Davis, Ingram, Merrin & Espelage, 2018), and youth can take the role of bully and victim (bully/victim). Bullying has a negative impact on bullies, victims and bully/victims, resulting in children and adolescents’ well-being deteriorating. For example, research has shown that bullying is linked to psychological distress (Garaigordobil & Machimbarrena, 2019; Halpern, Piña & Vásquez, 2017; Olenik-Shemesh & Heiman, 2014). Moreover, prior research has pointed out the accumulative effect of being exposed to a number of adverse experiences (e.g. bullying and household dysfunction), which increase negative emotional outcomes like psychological distress and psycho-pathological symptoms (Barth et al. 2007; Iranzo, Buelga, Cava & Ortega-Barón, 2019; Larkin, Felitti & Anda, 2014; Rey, Calonge & Martínez-Arias, 2017).

Bullying behaviors are present in different countries and regions (Zych, Ortega-Ruiz & Del Rey, 2015). In recent decades, several studies have analyzed bullying in youths from minorities because it is understood that they tend to be affected by traditional bullying and cyberbullying (Llorent, Ortega-Ruiz & Zych, 2016); e.g. sexual minorities (Collier, van Beusekom, Bos & Sandfort, 2013; Mitchell, Ybarra &

Korchmaros, 2014), and ethnic-cultural minorities (Monks, Ortega-Ruiz & Rodríguez-Hidalgo, 2008; Rodríguez-Hidalgo, Ortega-Ruiz & Zych, 2014). Other minorities have not drawn attention to the same extent, which is the case of youths in child protection programs. Some authors have pointed out that these youths are a highly vulnerable group (Fernández-Molina et al., 2011; Scholte, 1997; Vorria et al., 1998). For example, children in institutional care can show much higher rates of internalizing and externalizing problems, e.g., aggressiveness, isolation or emotional upset (Heflinger, Simpkins & Combs, 2000; Leenarts, Diehle, Doreleijers, Jansma & Lindauer, 2013; Simsek, Erol, Öztop & Münir, 2007). Research has consistently shown an increased risk for children in institutional care of exhibiting more problem behaviors than youths from the general population (Haskett, Nears, Ward & McPherson, 2006; Hazen et al., 2009; Leslie et al., 2010).

Bullying in Spain is a serious social problem for both the scientific community and teachers, parents and guardians because it affects many children and adolescents (León-Moreno, Martínez-Ferrer, Musitu-Ochoa & Moreno-Ruiz, 2019; Machimbarrena & Garaigordobil, 2018). There have been plenty of studies into the apparently many causes of bullying in recent decades (De la Poza, Jódar & Ramírez, 2018). Nonetheless in Spain, studies into the bullying of tutored minors living in residential childcare have not been sufficiently thorough. In Spain, the Organic Law on the Legal Protection of Minors distinguishes between risk situations and lack of protection; each one leads to a differing degree of intervention by the Public Administration. Risk situations and vulnerability include those in which childcare figures do not completely shoulder their responsibilities to ensure children's normal development. Then there are non-protection situations in which children have been separated from their families because their background is conflictive (Fernández-Daza & Fernández-Parra, 2013). The former situation no implies children being separated from their family whereas public actions will involve removing any risk factors that negatively impact the personal-social adjustment of not only children and adolescents, but also their families. In non-protection situations, given the seriousness of this situation, the competent Public Administration provides minors with tutelage by taking appropriate protection measures. While tutelage continues, minors' needs are guaranteed and covered by the following forms of care: foster family or residential childcare. The latter is defined as an intermediate resource and, depending on each case, work can be done on reunification, foster families, emancipation or adoption. The central theme of this work is minors' normalization so that boys and girls living in residential childcare can live a life that is as similar as possible to that of other children all the time (Martín, Muñoz de Bustillo, & Pérez, 2011).

As of 31 December 2016, 14104 minors were living in childcare in Spain, and more than 30% of them were foreign (Childhood Observatory of Spain, 2018). Tutelage, which guarantees that minors' needs are met, can be found in family-based care or residential childcare, when their larger family (e.g. grandparents, aunts, uncles, etc.) was not considered suitable to provide such care. In Spain, about 40% of protected minors live in residential childcare. The ages of most of them (45%) are between 10 and 15 years, 25.9% are aged 16-18 years, 26.3% are aged 5-9 years and only 1.8% are under the age of 2. Moreover, 31% have been in their current residential placement for less than 1 year, almost 67% have been in their current residential placement for about 3 years, and 9% have been living in residential child care facilities for more than 9 years (Childhood Observatory of Spain, 2018). The professionals of social work and social education work with children and promote their well-being (Curtis, Alexander & Lunghofer, 2001). This resource appeared in Spain much later than in other countries, specifically in the last decades of the 20<sup>th</sup> century (Martín, 2011).

According to Gribble (2007), constraints of residential care facilities can result in problems in interpersonal relations, including bullying behaviors. For example, several studies have reported higher prevalence levels of externalizing disorders among youths living in residential care while they address others (Keil & Price, 2006; Sainero, del Valle & Bravo, 2015). Indeed the results obtained from the comparative study by Fernández-Molina et al. (2011), conducted with Spanish adolescents in adoption or residential care, or have been fostered by their grandparents, showed that adolescents in residential care had higher levels of aggressive behaviors than their peers in pre-adoption or fostered by their grandparents. Other studies have also found that children living in residential childcare show higher levels of conduct problems than minors fostered by families (Cheung, Goodman, Leckie & Jenkins, 2011; Keller et al., 2001). Yet other authors have found no evidence to demonstrate that living in residential childcare is necessarily negative for minors (Kendrick, 2005; Martin, Rodriguez & Torbay, 2007).

Regarding bullying behaviors, different studies conducted with young people in care institutions report high levels of being involved in bullying episodes against other youth residents (Gibbs & Sinclair, 2000; Sekol & Farrington, 2010, 2016) and that bullying in residential care is a prevalent problem (Barter, Renold, Berridge & Cawson, 2004; Sekol, 2013). Sekol and Farrington (2009) found that approximately 75% of the residents in Croatian correctional homes and children's homes were involved in bullying 2 or 3 times a month, or more often, as either victims or perpetrators. Sekol and Farrington (2016) also examined the self-reported bullying of young people in care institutions (Children's Homes, Community Residential

Homes, State Residential Homes and Correctional Institutions). Boys and girls were equally likely to be classified as bullies: 46.8% of them were male and 50.8% were female. Of the residents who were bullies, 75.1% were also victims. No differences in terms of getting involved in bullying were found among the different institutions that participated in the study. Other studies report similar involvement proportions (Gibbs & Sinclair, 2000; Sekol & Farrington, 2010). Sekol and Farrington (2010) concluded that bullies/victims do not qualitatively differ from pure bullies and pure victims. The results obtained from various studies reveal that bullying in residential care is linked to the institution's context itself (Mazzone, Nocentini & Menesini, 2017; Rutter, 2000; Sekol, 2013; 2015).

Several authors have attempted to explain the relation between residential care institutions and bullying. Lee and Thompson (2009) suggest that minors in residential care institutions may be at risk of increasing conduct problems as this spreads to peers, and due to more exposure to disruptive behaviors. Other authors have related this with the large number of minors living together in residential care institutions (Faris, & Felmlee, 2011; Gosselin et al. 2014). However, Font (2015) indicates that the children living in residential childcare report having faced many behavioral problems before they arrived at these institutions. For example, several international studies, and also some Spanish ones, have stressed that the children and youths who access residential childcare generally come with a series of difficulties to adapt to school and social relationships in class (Martín, et al., 2007; Trout, Hagaman, Casey, Reid & Epstein, 2008). Muela, Balluerka and Torres (2013) also report that reference teachers in these institutions and school teachers consider that the children in residential childcare display fewer social skills to help them satisfactorily interact with peers. Previous works have revealed that children in residential childcare are described by their classmates as being aggressive, they behave to draw others' attention, and poorly relate with their peers (Martín, Muñoz de Bustillo, Rodríguez & Pérez, 2008). This indicates that their behavioral profile makes peer relationships difficult, including bullying. Another apparently related factor refers to changing schools, which is something that the children arriving at residential institutions often suffer (Stone, 2007). Conversely, those children who go to foster families more often maintain links with their family relatives and receive more social support, which could reduce their engagement in aggressive conducts compared to those living in residential childcare (Akcinar, & Baydar, 2016).

Although bullying in the residential care context is still under-researched (Sekol & Farrington, 2016), even less information is available about the nature of the social interactions of institutionalized children with non-institutionalized children (Almas et al., 2015). Martínez-Martínez et al. (2017) conducted

a descriptive study on bullying among adolescents in residential care from Granada, Spain. Adolescents identified themselves as bullying perpetrators (10.8%) and bullying victims (16.7%), with no gender differences. On the contrary, studies conducted in Spain on the prevalence of non-institutionalized bullying among schoolchildren aged 10-12 years showed that 8.9% were victims of bullying and 3.6% were perpetrators of bullying (Navarro et al., 2015). Another more recent study done with 2197 Primary and Secondary Education students revealed that 8% were identified as victims of verbal aggression and 1.1% were victims of physical aggression, while 2% were perpetrators of verbal forms and 0.7% inflicted physical violence (Rodríguez-Álvarez, Cabrera & Yubero, 2018). Research into the psychological and emotional impact of bullying among youths in residential care has shown that most participants informed that bullying had a long-lasting negative emotional impact on their lives (Barter et al., 2004). The qualitative results obtained from the study about youths in care by Sekol (2013) showed that involvement in bullying significantly interfered with well-being. Indeed male bullies and female victims from 10 residential institutions in Croatia reported lower levels of overall well-being (Sekol, 2015).

Comparative studies into the existence of problems between groups covered by different protection measures have been more frequently conducted (Fernández-Molina et al., 2011; Heflinger, Simpkins & Combs-Orme, 2000; Sekol, 2015). Nevertheless, studies comparing children in residential care *versus* non institutionalized children from the same community are necessary to better assess the situation of protected minors (Fernández-Daza & Fernández-Parra, 2013; Pears, Fisher, Bruce, Kim & Yoerger, 2010). This study was designed to analyze the role of the residential child care context in bullying, and to explore the relation linking bullying, psychological distress and life in residential care facilities. The present study was specifically interested in analyzing the differences in interventions in both bullying and psychological distress between boys and girls aged 10-15 years living in residential childcare and those living with their biological family. So its purpose was to: a) extend previous research by determining if any association exists between bullying and residential care; b) analyze the impact of bullying on psychological distress. To do so, the following assumptions were proposed: as bullying is linked to psychological distress, and as children from residential care institutions in other countries who have been bullies and victims showed lower levels of well-being, our first study hypothesis was H1: perpetration, victimization, psychological distress and the residential childcare context would positively correlate. As former research has indicated that children in residential childcare report higher levels of engaging in bullying, we therefore expected that H2: The residential childcare context would be related with bullying involvement and, consequently,

children in residential care would show higher levels of bullying involvement. By bearing in mind the accumulative effect of adverse experiences on psychological distress, we expected that H3: Bullying experiences would more strongly impact the psychological distress among minors in residential childcare compared to those minors living with their biological families.

## **Method**

### **Participants**

Our final study sample was made up of 1537 students in the two last years of Primary Education (793 students, 51.6%) and 744 students of Secondary Education (48.4%). Respondents were 56 minors aged 10-15 living in residential childcare from four Spanish Autonomous Communities managed by the NGO that participated in the study, with 28 males (50%) and 28 females (50%). The eligibility requirements for the students living in residential childcare were: (a) the child was aged between 10 and 15; (b) the child had been in his or her current placement for at least 3 years (to minimize the selection of children in temporary shelters or emergency placements); (c) the child was not severely physically or mentally handicapped. The only institution that accepted to voluntarily participate in the present study assisted 419 minors in residential childcare facilities in the year when this research study was conducted, of whom 209 were aged 10-15 years. Of these 419, only 127 met the requirements set out by the study. Seventy-two minors voluntarily accepted to participate, but only 56 completed all the items in the study scales. Therefore, the participation rate for the residential childcare study population was 44%.

Fifty-six classrooms with similar educational levels and socio-demographic characteristics to those of the minors in residential childcare were used for a community comparison (fostered children went to education centers with similar characteristics to those selected for the study), and totaled 1481 minors who consistently lived with at least one biological parent, of whom 704 were males (47.5%) and 777 were females (52.5%). The eligibility requirements for the students in the community comparison were: (a) the child was aged 10-15; (b) the child had lived with at least one biological parent; (c) the child was not severely physically or mentally handicapped. In the community comparison, 49.7% reported living at home with their mother and father, 35.2% with their mother and 15.1% with their father.

The characteristics of children in residential child care and community comparison groups are show in Table 1. No significant differences were found between groups in terms of age, gender, country of origin and level of education.

-Insert approximately here Table 1-



## Procedure

This is an *ex post facto* cross-sectional descriptive study. Five social organizations that manage the resources used in residential childcare were contacted to collect data on minors in residential childcare. Only one agreed to take part in this research. This organization is an international, private, child-assistance non-profit organization with no political orientation whatsoever. It is present in more than 135 countries, where it assists families, children and youths through a series of protection and prevention programs. This organization manages the residential childcare resources in the four Spanish Autonomous Communities.

Both children and adolescents completed a 20-minute questionnaire. The participants were assured that their individual responses would remain anonymous and would not be seen by their parents, peers or teachers. The adolescents were informed that there were no right or wrong answers. The community comparison group data were collected in classrooms with parents' informed consent. The data on the minors in residential childcare were collected in the foster home where they lived after obtaining the institution's consent. Questionnaires were applied by the research team members in the presence of the teachers in public schools, or in the presence of the institution's staff with the minors in residential childcare.

## Measures

First the participants gave information about their age, gender and level of education. They then answered the Spanish version of a battery of questionnaires measuring self-reported bullying, victimization and perpetration, and psychological distress.

**Bullying behaviors.** The *Bullyharm* scale was used (Hall 2016), a tool made up of 14 items to self-report bullying behaviors in the real world and on the Internet which had taken place in the last month. The items were scored on a 3-point scale (0 = never; 1 = once or twice in the past month; 2 = about once a week; or 3 = twice a week or more). In this study, Cronbach alpha reliability coefficient was .86 for victimization and .80 for aggression.

**Psychological distress.** The *Kessler Psychological Distress Scale* was used (K10; Kessler & Mrozeck, 1994). K10 is made up of 10 items and uses a 5-answer Likert-type scale ranging from 10 to 50 points. It assesses the risk of having suffered psychological distress in the last month. In this study, Cronbach alpha reliability coefficient was .83.

## Data Analysis

Correlational analyses were conducted to analyze the bivariate relations between variables. MANCOVA analyses were conducted to determine if there was an overall group effect for residence type (residential childcare or having lived with at least one biological parent) on bullying behaviors by controlling for age and level of education. The respondents were categorized as victims or bullies following a highly restrictive criterion, similar to that used by other researchers (Scheithauer, Hayer, Petermann & Jugert, 2006; Yubero, Larrañaga; Villora & Navarro, 2017). Logistic regression analyses were employed to determine the association between psychological distress and victimization, perpetration by adjusting for gender and level of educational, and stratifying by residence type. The SPSS 23.0 statistical software was used for all the analyses.

## Results

Correlational analyses were first performed for the whole sample. The results showed that residence type correlated positively with victimization ( $r = .09$ ,  $p < .000$ ) and perpetration ( $r = .51$ ,  $p < .000$ ). However, residence type did not correlate with psychological distress ( $r = .03$ , ns). Psychological distress correlated positively with victimization and perpetration. Then correlational analyses were performed separately for each residence type. The correlations between variables are shown in Table 2. Victimization and perpetration correlated positively with psychological distress, irrespectively of residence type. Regarding the participants who lived with at least one biological parent, gender correlated positively with perpetration and psychological distress. In this same group, level of education also correlated positively with psychological distress. For the participants living in residential childcare, no significant correlations were observed between gender and level of education and the other study variables.

-Insert approximately here Table 2-

The results of the MANCOVA for the resident type data revealed a statistically significant effect [Lambda (3.1462) = 0.98,  $F = 9.03$ ,  $p < .000$ ,  $\eta^2 = .02$ ]. The follow-up univariate analyses indicated that those students in residential childcare were much more likely to report higher levels of involvement as both victims and perpetrators (Table 3). No differences were observed in terms of psychological distress. In gender terms [Lambda (3.1462) = 0.97,  $F = 16.36$ ,  $p < .000$ ,  $\eta^2 = .03$ ], significant differences were found for aggression,  $F = 7.43$ ,  $p < .001$ ,  $\eta^2 = .02$ , which was higher for boys,  $M = 2.41$ ,  $SD = 3.51$ , than for girls,  $M =$

1.54,  $SD=2.54$ . Psychological distress,  $F=7.43$ ,  $p<.01$ ,  $\eta^2=.00$ , was lower for boys,  $M=17.93$ ,  $SD=6.59$ , than for girls,  $M=18.93$ ,  $SD=6.79$ . The level of education variable [ $\Lambda(3.1462)=0.99$ ,  $F=5.26$ ,  $p<.000$ ,  $\eta^2=.01$ ], was only significant in psychological distress,  $F=7.83$ ,  $p<.01$ ,  $\eta^2=.00$ , and was lower in Primary Education,  $M=17.98$ ,  $SD=6.15$ , than in Secondary Education,  $M=18.96$ ,  $SD=7.20$ .

-Insert approximately here Table 3-

Of the whole sample, 212 (13.8%) adolescents were categorized as victims and 202 (13.1%) as bullies. Gender and level of education were included in the regression analyses, together with residence type (Table 4). Regarding bullying behaviors, residential childcare was found to be significantly associated with the victim role ( $\beta=0.95$ ,  $p<.01$ ,  $OR=2.60$ ). Gender ( $\beta=0.79$ ,  $p<.001$ ,  $OR=0.45$ ) and residential childcare ( $\beta=1.22$ ,  $p<.001$ ,  $OR=3.39$ ) were significantly associated with the perpetrator role.

-Insert approximately here Table 4-

The results of the logistic regression on psychological distress (Table 5) showed that those adolescents who were victims and perpetrators also reported higher levels of psychological distress, with higher levels for victims ( $\beta=1.61$ ,  $p<.001$ ,  $OR=4.99$ ) than for perpetrators ( $\beta=0.67$ ,  $p<.001$ ,  $OR=1.96$ ). Residential childcare only entered the equation if it was significantly associated with being a perpetrator ( $\beta=1.63$ ,  $p<.05$ ,  $OR=5.10$ ).

-Insert approximately here Table 5-

Logistic regression analyses were conducted in the same way as they were above for the children living with any biological parent and in residential childcare separately. The results (Table 6) showed that the association between perpetration and psychological distress was stronger for the youths in residential care ( $\beta=2.36$ ,  $p<.05$ ,  $OR=10.65$ ) than for those living with their biological parents ( $\beta=0.67$ ,  $p<.001$ ,  $OR=1.96$ ). The association between victimization and psychological distress was more similar for the adolescents in residential care ( $\beta=1.63$ ,  $p<.05$ ,  $OR=5.11$ ) than for the minors living with their biological parents ( $\beta=1.61$ ,  $p<.001$ ,  $OR=5.01$ ). For adolescents living in residential care, aggression between peers explained 41% of variability in psychological distress terms. The variables gender and level of education did not contribute to the regression equation for the minors in residential childcare.

-Insert approximately here Table 6-

## Discussion

Previous research has compared adaptation to school in children in residential childcare with children living with their biological family, and has shown that, compared to their classmates, those in residential childcare also displayed worse performance, more social problems, aggressive conduct and less interaction than their peers (Simsek et al., 2007; Vorria et al., 1998). Community resources play a fundamental role in the attention paid to minors living in residential childcare. Of these resources, school plays a very important role for them because, among other reasons, it is a normalized context in which symmetrical relationships can be established with other boys and girls (Berridge, 2007). Having friends enables social skills to be developed and helps children receive vital emotional support (Gifford-Smith & Brownell, 2003). Such relationships are particularly important for these children because they play a compensatory role and become a protector factor. Otherwise, school and social integration problems may have negative effects on the development and well-being of children and them adapting.

In Spain, very few studies have been conducted with comparative samples. Lack of studies in Spain about minors reported in risk situations is possibly because the Law on Amending the Protection System for Infants and Adolescents was not passed until 2015. The few research works conducted in Spain stress the importance of conducting studies to identify the situation in which children in residential childcare find themselves in. The objective of this study was to examine the associations between bullying behaviors and psychological distress. We compared the bullying involvement of children in two groups: institutionalized children in residential childcare facilities and their non-institutionalized peers who lived consistently with at least one biological parent (community sample).

The first hypothesis (H1) was partially confirmed as psychological distress was not linked to the place where minors lived. No differences were found in psychological distress terms between those minors in residential childcare and those living with their biological families. This result falls in line with other research which has found that living in childcare institutions does not necessarily imply a negative experience (Armsden et al., 2000; Kendrick, 2005; Martin et al., 2007). Nonetheless, both victimization and perpetration of bullying are related with psychological distress in minors in residential childcare and those living with their biological families. These results confirm that bullying is associated with

psychological distress (Gross, Juvonen & Gable, 2002; Halpern, Piña & Vásquez, 2017; Olenik-Shemesh & Heiman, 2014).

The bullying involvement results are especially interesting for examining the vulnerable position of minors in residential childcare in more depth. The logistic regression analyses showed that children in residential childcare were more likely to suffer bullying victimization and be bullying perpetrators, which confirmed our second hypothesis (H2). These results indicated that residential childcare could be a risk factor that contributes to be both a victim and a perpetrator (Mazzone et al., 2017; Rutter, 2000; Sekol, 2013; 2015). In accordance with previous studies, minors in residential childcare reported higher levels of bullying involvement as both victims and perpetrators than those not living in residential childcare (Gibbs & Sinclair, 2000; Martínez-Martínez et al., 2017; Sekol & Farrington, 2010; Sekol & Farrington, 2016). Other studies have shown that belonging to a minority group is a predictive factor for engaging in bullying (Collier et al., 2013; Llorent et al., 2016; Mitchell et al., 2014; Monks et al., 2008; Rodríguez-Hidalgo et al., 2014). Belonging to a minority group of minors in residential childcare also seems a significant predictive factor of being involved in bullying as victims, but largely as perpetrators. Previous research has found that the youths in residential care who had been victimized believe that their peers considered them to be “different”, and this perception could made them more vulnerable to bullying (Waseem et al., 2014).

These results confirm previous research data stating that the youths who are, or have been, protected by some child protection system are at risk of social exclusion (Attar-Schwartz, 2009). As these analyses were correlational in nature, it was not possible to determine the direction of the relationship between bullying and residential childcare. Regarding this association, living in residential childcare could possibly increase children’s levels of externalizing behavior problems (Cheung et al. 2011). Along the same line, Gribble (2007) has reported that institutionalization is related to problems in interpersonal relations. In many cases however, these institutionalized minors belong to conflictive family contexts, which may explain their involvement in bullying (Buelga, Martínez-Ferrer & Cava, 2018; Larrañaga, Yubero, Navarro & Ovejero, 2016; Leyera, Samara & Wolke 2013). This could also be due to previous problems that have not always been related with living in residential childcare (Font, 2015; Martín et al., 2007; Stone, 2007; Trout et al., 2008).

Regarding the associations linking bullying, psychological distress and residential childcare (H3), and in line with previous studies, our results confirmed a relationship between being a victim or a perpetrator and higher psychological distress levels (Gross et al., 2002; Halpern et al., 2017; Olenik-

Shemesh & Heiman, 2014). Residential childcare explained a large proportion of distress among perpetrators, which was much bigger for the minors living with their biological families. The minors in residential childcare reported more bullying behaviors and psychological distress linked to bullying events than those living with their biological parents. These results are consistent with previous research, which has shown an increased risk for children in residential care of having behavioral problems compared to other youths (Haskett et al., 2006; Hazen et al., 2009; Leslie et al., 2010).

To summarize, the present study confirms that minors in residential childcare are a vulnerable group to bullying behaviors (Fernández-Molina et al., 2011; Scholte, 1997; Vorria et al., 1998). One implication of this finding is that further studies are needed to tear down the invisibility of vulnerable minors (Rodríguez & Morell, 2012). There are many family types, of which foster homes are one. It is another way of living and seeing families, but a temporary one. It should be presented as another form of diversity and merits due attention. It is not a matter of pathologizing these minors, but of knowing their problems and facilitating institutionalization in a healthy context that also covers school and promotes their development.

#### **Limitations and future research directions**

Although this is one of the first studies to examine the relation between bullying and living in residential childcare in Spain, several study limitations must be noted. In the first place, the results obtained herein would have more external validity if replicated with larger samples of individuals. The sample included only minors aged between 10-15 years, and did not examine infants or older youths in residential childcare.

Nevertheless, it is very difficult to perform such a study with minors covered by different protection measures. Gaining access to them is increasingly difficult as obtaining institutions' consent is pitted with difficulties. Moreover, given legal aspects related to the Data Protection Act, and despite the researchers of the present work scrupulously processing these data, accessing the files of children in non-protection situations is extremely difficult. As we did not gain access to learn the characteristics of these children's original families, we were unable to obtain some variables that would have been very interesting. One main limitation is that the children in residential childcare form a very heterogeneous group because the family or social causes that lead to this situation vastly differ. For instance, poverty, the low incomes of their families and their parents' social levels have all been related with dropping out of school early (Fitzpatrick, McKinnon, Blair & Willoughby, 2014; Schoon et al., 2002; Whipple, Evans, Barry &

Maxwell, 2010) and with a high bullying incidence (Lister et al., 2014; Pells, Ogando-Portela, & Espinoza-Revollo, 2016).

This study is based only on the residential care context and does not take other types of institutionalization and/or adoption into account. Prior research has also demonstrated a link between frequent changes in foster placements and increased behavior problems (Perry & Price, 2017), and considering this information in subsequent studies would be very interesting.

As only one institution participated in this study, it would be interesting to represent minors in residential childcare more widely. Working methods vastly differ from one another (Andersson, Johansson & Hwang, 2007) in Spain (Martín & González, 2007), and it would be interesting to draw comparisons between different institutions. From a qualitative point of view, it would also be advisable to conduct studies based on the opinions of minors in residential childcare, which would provide in-depth knowledge about not only how they live, but also violence in the school context.

It would also be very interesting to deal with this study subject using a longitudinal design to be able to follow up minors. The cross-sectional nature of the present research is one of its major limitations. Therefore, the results should not be construed in causal terms. We were unable to deduce if differences were due to either institutionalization or the conditions prior to institutionalization experiences acquired by minors. A longitudinal study would be able to follow up children from infancy, through school age, and into early and late adolescence. This would provide accurate information about how adaptive skills, personal adjustment and not adapting to school evolve. If children were separated from their family context, information could be obtained before this separation took place, after it and during the time children received protection measures when separated from their biological family, or even beyond this stage if they returned to their original family.

Finally, another limitation of this study, which must be considered for future works, refers to the wide variability in the situations faced by protected minors. The obtained results cannot be generalized to all protected minors. In order to look more closely the school adaption shown by children separated from their biological family, other groups should be examined, such as foreign children separated from their biological family, and young offenders for whom some protective measure has been taken.

### **Compliance with ethical guidelines**

All the procedures followed in the studies that involved human participants were in accordance with the ethical standards of the institutional and/or National Research Committee, and with the Declaration of Helsinki and its later amendments or comparable ethical standards. The procedure was approved by the Ethics Committee of the Universidad de Castilla-La Mancha.

### **Competing interests**

The authors declare that they have no financial or non-financial competing interests.

### **Author Contributions**

SY: designed the study, assisted with the data analysis and wrote the study. RN: collaborated with the design, the data analysis, wrote the study and edited the final manuscript. MJM: collaborated with the design and conducted the study. MGZ conducted the study and collaborated in writing the study. ME collaborated in writing and editing the final manuscript. EL: designed the study and conducted the data analyses.

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## Tables

Table 1. Sample Demographics

	Residential childcare	Biological parent	<i>t/χ<sup>2</sup>(p)</i>
Mean age in years	12.23	12.12	0.51 (.608)
Male	50%	47.5%	0.13 (.786)
Spain	92.8%	94.6%	0.27 (.793)
Primary School	51.5%	55.4%	0.33 (.589)
Residential child histories			
Mean number of maltreatment	2.17	—	
Physical abuse	33.9%	—	
Emotional maltreatment	62.5%	—	
Emotional neglect	35.7%	—	
Supervisory neglect	39.3%	—	
Violence in family	42.9%	—	

**Table 2.**  
 Statistics and correlations between variables

	1	2	3	4	5
1. Victimization	-	.52***	.39***	-.03	-.04
2. Perpetration	.36**	-	.29***	-.14***	.02
3. Psychological distress	.45***	.42***	-	.07**	.08**
4. Gender	.10	-.15	.06	-	.01
5. Level of education	-.10	-.04	-.01	.11	-

Note. The correlations for students in residential childcare are found below the diagonal lines, and those for students who lived with at least one biological parent are above them; \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

**Table 3.**  
 Involvement in bullying and psychological distress

Variable	Residence	<i>M (SD)</i>	<i>F</i>	<i>p</i>	$\eta^2$
Victimization	Biological parent	4.70 (5.66)	13.45	.000	.01
	Residential childcare	7.44 (6.61)			
Perpetration	Biological parent	1.88 (3.01)	28.93	.000	.02
	Residential childcare	4.05 (4.77)			
Psychological distress	Biological parent	18.43 (6.65)	1.44	.231	.00
	Residential childcare	19.49 (6.06)			

**Table 4.**  
Regression models examining bullying per residence type

	$R^2$	$\chi^2$	$\beta$	Wald	OR	95%CI
Victim	.00	2.17				
Step 1						
Gender			-0.10	0.49	0.90	0.67-1.20
Level of education			-0.18	1.49	0.83	0.62-1.12
Step 2	.01	10.67**				
Resident			0.95	9.76**	2.60	1.43-4.74
Perpetrator	.03	26.45***				
Step 1						
Gender			0.79	25.19***	0.45	0.33-0.62
Level of education			0.07	0.23	1.07	0.80-1.45
Step 2	.05	40.55***				
Resident			1.22	16.35***	3.39	1.87-6.12

Note. Gender: 1= Boy; Resident: 1= Residential childcare \* $p<.05$ , \*\* $p<.01$ , \*\*\* $p<.001$

**Table 5.**  
Regression models examining psychological distress per bullying and resident

	$R^2$	$\chi^2$	$B$	Wald	$OR$	95%CI
Step 1	.02	23.20***				
Gender			0.38	6.88**	1.46	1.10-1.93
Level of education			0.71	24.62***	2.04	1.54-2.71
Step 2	.03	27.04***				
Resident			0.57	0.82	0.56	0.16-1.93
Step 3	.16	161.48***				
Victim			1.61	80.78***	4.99	3.51-7.08
Perpetrator			0.67	11.72***	1.96	1.33-2.89
Step 4	.17	166.60***				
Resident*Victim			0.17	0.05	1.19	0.26-5.33
Resident*Perpetrator			1.63	4.62*	5.10	1.15-22.61

Note. Gender: 1= Boy; Resident: 1= Residential childcare \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

**Table 6.**

Regression models examining psychological distress per bullying for resident type.

	$R^2$	$\chi^2$	$\beta$	Wald	OR	95%CI
Biological parent						
Step 1	.03	25.08***				
Gender			0.37	6.55**	1.45	1.09-1.94
Level of education			0.74	25.70***	2.11	1.58-2.81
Step 2	.15	145.48***				
Victim			1.61	80.95***	5.01	3.53-7.12
Perpetrator			0.67	11.69***	1.96	1.33-2.89
Residential child care						
Step 1	.00	0.01				
Gender			0.56	0.54	1.76	0.39-7.98
Level of education			-0.11	0.02	0.90	0.21-3.85
Step 2	.41	18.93***				
Victim			1.63	4.72*	5.11	1.17-22.25
Perpetrator			2.36	9.48***	10.65	2.36-48.04